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| APPLICATION NO.                           | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|-------------------------------------------|-------------|----------------------|-----------------------|------------------|
| 09/995,999                                | 11/16/2001  | Yingwei Chen         | US010612              | 2601             |
| 24737                                     | 7590        | 08/11/2004           | EXAMINER              |                  |
| PHILIPS INTELLECTUAL PROPERTY & STANDARDS |             |                      | RAO, ANAND SHASHIKANT |                  |
| P.O. BOX 3001                             |             |                      | ART UNIT              | PAPER NUMBER     |
| BRIARCLIFF MANOR, NY 10510                |             |                      | 2613                  |                  |

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/995,999

Applicant(s)

CHEN, YINGWEI

Examiner

Andy S. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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## **DETAILED ACTION**

### *Specification*

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-22 rejected under 35 U.S.C. 102(e) as being anticipated by Song et al., (hereinafter referred to as "Song").

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Song discloses a method for extracting coding parameters from encoded video data (Song: figure 3), the method comprising the steps of: decoding at least a substantial portion of said encoded video data in an MPEG decoder and outputting a decompressed video data (Song: column 10, lines 1-23); performing a DC computation operation to recover an intra-dc-precision level from a first predetermined threshold (Song: column 10, lines 55-67; column 11, lines 1-15), determining that said decompressed video data being processed corresponds to an intra- coded picture (Song: column 12, lines 55-67), as in claim 1.

Regarding claim 2, Song further discloses that said intra-dc-precision level is equal to said first predetermined threshold, performing a discrete cosine transform (DCT) to produce at least one AC frequency band in said decompressed video data (Song: column 11, lines 50-55); and, if said intra-dc-precision level is less than said decompressed video data; calculating a dominant average quantizer step size for the at least one AC frequency band (Song: column 14, lines 30-40); and, if said average quantizer step size is greater than a second predetermined threshold, determining that said decompressed video data being processed corresponds to an intra- coded picture (Song: column 22, lines 1-45), as in the claim.

Regarding claims 3 and 5, Song discloses extracting quantization matrix data of a frame of said decompressed video data and, extracting a quantizer scale (Song: column 45-60) and a DCT type value for each block of said decompressed video data (Song: column 12, lines 40-65), as in the claims.

Regarding claims 4 and 6, Song discloses wherein the quantizer scale is calculated by averaging the AC coefficients in each of said decompressed video data (Song: column 11, lines 30-55), as in the claims.

Regarding claim 7, Song discloses that the decompressed video is divided into blocks (Song: column 10, lines 55-60), as in the claim.

Regarding claim 8, Song discloses that the quantization matrix, quantization scale, and DCT type value correspond substantially to coding parameters used in a coding operation that was previously performed on said encoded video data (Song: column 12, lines 50-65), as in the claim.

Song discloses method for extracting coding parameters from an encoded digital video signal (Song: figure 3), the method comprising the steps of: receiving encoded data of said encoded digital video signal at an MPEG decoder and producing therefrom decoded data (Song: column 9, lines 49-65) comprised of a plurality of blocks (Song: column 10, lines 55-60); performing a DC computation operation to recover an intra-dc precision level from said decoded video data (Song: column 10, lines 55-67; column 11, lines 1-15); if said intra-dc-precision level is less than a first predefined threshold, classifying said decoded video data as an intra-coded picture (Song: column 11, lines 50-55); if said intra-dc-precision level is equal to said first predefined threshold, performing a discrete cosine transform (DCT) on said decoded video data to produce a set of DCT coefficients for at least one AC frequency band (Song: column 14, lines 30-40); calculating a quantizer step size for the at least one AC frequency band; and, classifying said decoded video data as an intra-coded picture (Song: column 14, lines 1-25) if said

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calculated quantizer step size is greater than a second predefined threshold (Song: column 22, lines 1-45), as in claim 9.

Regarding claim 10, Song discloses extracting quantization matrix data of a frame of said decompressed video data and, extracting a quantizer scale (Song: column 45-60) and a DCT type value for each block of said decompressed video data (Song: column 12, lines 40-65), as in the claims.

Regarding claim 11, Song discloses wherein the quantizer scale is calculated by averaging the AC coefficients in each of said decompressed video data (Song: column 11, lines 30-55), as in the claims.

Regarding claim 12, Song discloses that the quantization matrix, quantization scale, and DCT type value correspond substantially to coding parameters used in a coding operation that was previously performed on said encoded video data (Song: column 12, lines 50-65), as in the claim.

Song discloses system for extracting coding parameters from encoded video data (Song: figure 2) comprising: a decoder for decoding at least a substantial portion of said encoded video data to produce decoded video data comprised of a plurality of blocks (Song: column 10, lines 1-23); a computation circuit for performing a DC computation operation to recover an intra-dc-precision level from said decoded video data (Song: column 10, lines 55-67; column 11, lines 1-15); and, a decision circuit for determining whether said decoded video data being processed corresponds to an intra-coded picture (Song: column 12, lines 55-67), as in claim 13.

Regarding claim 14, Song further discloses a discrete cosine transform (DCT) circuit for generating a set of DCT coefficients for at least one AC frequency band in said

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decoded video data (Song: column 11, lines 50-55); and, a quantization computation circuit for determining a quantizer step size for the at least one AC frequency band (Song: column 16, lines 10-24), as in the claim..

Regarding claim 15, Song discloses that said decoded video data is classified as an intra-coded picture if said intra-dc precision level is less than a first predetermined threshold (Song: column 14, lines 30-40), as in the claim.

Regarding claim 16, Song discloses wherein said decoded video data is classified as an intra-coded picture if said quantizer step size is greater than a second predetermined threshold (Song: column 22, lines 1-45), as in the claim.

Regarding claims 17-18, Song discloses a first and second extractor for extracting quantization matrix data of a frame of said decompressed video data and, extracting a quantizer scale (Song: column 45-60) and a DCT type value for each block of said decompressed video data (Song: column 12, lines 40-65), as in the claims.

Regarding claim 19, Song discloses that the quantization matrix, quantization scale, and DCT type value correspond substantially to coding parameters used in a coding operation that was previously performed on said encoded video data (Song: column 12, lines 50-65), as in the claim.

Song discloses a system for extracting coding parameters from an encoded digital video signal, (Song: figure 3), the method comprising the steps of: a memory for storing a computer readable code (Song: column 9, lines 15-22); and, processor operatively coupled to said memory (Song: column 9, lines 10-15), said processor configured to: receive encoded data of said encoded digital video signal at an MPEG decoder and producing therefrom decoded data (Song: column 9, lines 49-65) comprised of a plurality

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of blocks (Song: column 10, lines 55-60); perform a DC computation operation to recover an intra-dc precision level from said decoded video data (Song: column 10, lines 55-67; column 11, lines 1-15); classify said decoded video data as an intra-coded picture if said intra-dc-precision level is less than a first predefined threshold (Song: column 11, lines 50-55); perform a discrete cosine transform (DCT) on said decoded video data to produce a set of DCT coefficients for at least one AC frequency band if said intra-dc-precision level is equal to said first predefined threshold (Song: column 14, lines 30-40); calculate a quantizer step size for the at least one AC frequency band; and classify said decoded video data as an intra-coded picture (Song: column 14, lines 1-25) if said calculated quantizer step size is greater than a second predefined threshold (Song: column 22, lines 1-45), as in claim 20.

Regarding claim 21, Song discloses a first and second extractor for extracting quantization matrix data of a frame of said decompressed video data and, extracting a quantizer scale (Song: column 45-60) and a DCT type value for each block of said decompressed video data (Song: column 12, lines 40-65), as in the claim.

Regarding claim 22, Song discloses that the quantization matrix, quantization scale, and DCT type value correspond substantially to coding parameters used in a coding operation that was previously performed on said encoded video data (Song: column 12, lines 50-65), as in the claim.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Divakaran discloses a method for summarizing a video using



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motion and color descriptors. Lee discloses a method for producing a visual rhythm using a pixel sampling technique. Sun discloses methods of fade detection.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813.

The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao  
Primary Examiner  
Art Unit 2613

asr  
August 5, 2004

ANDY RAO  
PRIMARY EXAMINER

